Refine Search

Search Results -

Terms	Documents
account near (fund or fund$) and transfer and deposit and (consumer or customer) near (auction or buy$ and sell$ or trad$) and (qualify or qualif$ or qualified)	8

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
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IBM Technical Disclosure Bulletins

Search:

[Refine Search]

[Recall Text ⬍]   [Clear]   [Interrupt]

Search History

DATE: Saturday, March 05, 2005   Printable Copy   Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
L18	account near (fund or fund$) and transfer and deposit and (consumer or customer) near (auction or buy$ and sell$ or trad$) and (qualify or qualif$ or qualified)	8	L18
L17	account near (fund or fund$) and transfer and deposit and (consumer or customer) near (auction or buy$ and sell$ or trad$)	33	L17
L16	account near (fund or fund$) and transfer and deposit and (consumer or customer) and auction	101	L16
L15	account near (fund or fund$) and transfer and deposit	885	L15
L14	account near (fund or fund$) and transfer and deposit and (consumer or customer)	782	L14
L13	account and fund and fund$ and transfer and deposit and (consumer or customer)	2458	L13
L12	13 and 19	26	L12

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L11	l1 and l9	19	L11
L10	l2 and l9	21	L10
L9	(funding or fund) and account and (qualified or qualify$) and (reserve or reserved) and (deposit or deposit$) and (staisfied or satisfies or satisfy$) and condition	180	L9
L8	707/10	9752	L8
L7	query$ near (website or web with site or home with page or homepage or internet near site or internet with site)	67	L7
L6	707/3	7134	L6
L5	707.clas.	25375	L5
L4	705.clas.	32321	L4
L3	705/39	1610	L3
L2	705/37	2140	L2
L1	705/40	1288	L1

END OF SEARCH HISTORY

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L17: Entry 29 of 33   File: USPT   Aug 29, 2000

US-PAT-NO: 6112191
DOCUMENT-IDENTIFIER: US 6112191 A

TITLE: Method and system to create and distribute excess funds from consumer
spending transactions

DATE-ISSUED: August 29, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Burke; Bertram V.	Seabright	NJ		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Every Penny Counts, Inc.	Red Bank	NJ			02

APPL-NO: 08/ 429758   [PALM]
DATE FILED: April 27, 1995

PARENT-CASE:
REFERENCE TO CO-PENDING APPLICATIONS This is a Continuation In Part of applications
Ser. No. 08/018,821 filed on Feb. 18, 1993, now abandoned, Ser. No. 08/172,221
filed on Dec. 23, 1993. This application is also a continuation-in-part of
application Ser. No. 08/349,353 filed Dec. 5, 1994, which is a continuation of the
aforementioned application Ser. No. 08/018,821 filed Feb. 18, 1993. This
application is also a continuation-in-part of application Ser. No. 08/428,401 filed
Apr. 25, 1995, now abandoned.

INT-CL: [07] G06 G 1/12, G06 G 7/52, G06 G 1/14, G06 F 17/60

US-CL-ISSUED: 705/41; 235/375, 235/379, 705/17, 705/21, 705/24, 705/39
US-CL-CURRENT: 705/41; 235/375, 235/379, 705/17, 705/21, 705/24, 705/39

FIELD-OF-SEARCH: 235/375, 235/376, 235/379, 235/380, 705/1, 705/14, 705/15, 705/16,
705/17, 705/18, 705/21, 705/24, 705/30, 705/34, 705/39, 705/40, 705/41; 705/42,
705/43, 705/44, 902/4, 902/8, 902/20, 902/21, 902/22, 902/24, 902/25, 902/41

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

▨ Search Selected ▨ ▨ Search ALL ▨ ▨ Clear ▨

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	3833885	September 1974	Gentile et al.	235/379

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☐	<u>4355369</u>	October 1982	Garvin	235/379
☐	<u>4607335</u>	August 1986	Mizuno	705/14
☐	<u>4673802</u>	June 1987	Ohmae et al.	235/379
☐	<u>5111395</u>	May 1992	Smith et al.	705/45
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☐	<u>5339239</u>	August 1994	Manabe et al.	705/1
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☐	<u>5506393</u>	April 1996	Ziarno	235/380
☐	<u>5546303</u>	August 1996	Helbling	705/30
☐	<u>5555497</u>	September 1996	Helbling	705/14
☐	<u>5621640</u>	April 1997	Burke	235/375

ART-UNIT: 271

PRIMARY-EXAMINER: Tkacs; Stephen R.

ATTY-AGENT-FIRM: Stanger; Leo

ABSTRACT:

An improved system for consumer payors to save and donate whenever they use cash at
a point of sale terminal, write a check, use an ATM machine, or use a credit or
debit card. The POS system is a network composed of subscriber/payors, neutral
merchant/collectors, a central clearinghouse, and provider accounts. The Rounder
system is a network composed of subscriber/payors, payees, account managers, and
provider services. The systems together provide subscriber/payors with a seamless
way to save/donate every time they spend.

34 Claims, 28 Drawing figures

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L17: Entry 29 of 33   File: USPT   Aug 29, 2000

DOCUMENT-IDENTIFIER: US 6112191 A
TITLE: Method and system to create and distribute excess funds from consumer
spending transactions

Brief Summary Text (2):
The present application relates to improved methods and systems to create excess
funds from traditional consumer spending transactions using cash, checks, credit or
debit card. The excess funds created are then put aside in special accounts for
future spending.

Drawing Description Text (5):
FIG. 1F is a block diagram of the Data and Funds Transfer used in both POS systems
embodying features of the invention.

Detailed Description Text (3):
(1.) In FIG. 1A, an "open" POS network embodies a four level spending/saving system
comprised of Level 1 SP (multiple subscriber/payors), who tender excess payments or
deposit excess funds to Level 2 MC (multiple merchant/collectors), who in turn make
computer entry of data and finds for electronic transfer to Level 3 CCC (a singular
managed clearinghouse central computer), who in turn transfers data and funds to
Level 4 (multiple provider accounts), for the final purchase of products or
services.

Detailed Description Text (5):
After the amount of excess funds is determined by the MC's electronic cash register
(ECR), the SP makes a deposit into a clearinghouse central computer (CCC) by
providing a transaction card or an account number to the MC. The MC then swipes the
card or enters the account number through an ECR or a draft capture remote terminal
to record the time, the terminal location, the amount of funds entered, and the
account number used. The terminal or cash register then prints out a receipt of the
depositing transaction and the MC returns the card and the receipt to the SP.

Detailed Description Text (7):
Each terminal location follows the same reporting procedure so that the CCC will
have a record of all transactions made into the system, regardless of the location
of the terminals. The files transferred to the CCC contain details of each
deposited transaction by the identification of the account, the amount of the
deposit, the date, and the terminal that accepted the deposit. The actual transfer
of cash into the system starts when the MC deposit the cash received from the SP
into their bank for EFT transfer to the clearinghouse's bank account and concludes
with the CCC EFT transferring funds to each listed PC (provider account) per the
transaction records received from the merchant terminals. The transfer of cash from
one account to the next is accomplished by the usual and customary bank EFT
transferring through the ACH (Automatic Clearing House) or via EDI (Electronic Data
Interchange).

Detailed Description Text (8):
Effectively, the system allows each SP the ability to make multiple deposits, in
varied cross country locations, into terminals operated by unrelated parties,
depositing as little as a penny in any one transaction, and often on a 24 hour

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demand basis.

Detailed Description Text (9):
The MC that operate the ECR terminals are at the time of depositing both neutral
and passive as to the selection of the consumer's provider(s), as well as not
directing the distribution of funds to the consumer's provider(s). Only in this
system are SP able to deposit their excess change created when dealing with
multiple and diverse payees. The money is deposited into an "open" network that
will pool and then transfer the once fragmented funds onto PA selected by the SP.
In this system as compared to the existing state of art, the PA who will receive
the deposited funds from the network need not also be the original collector of the
deposits. Therefore, we have a "open" system that allows for a mix and match of
diverse collectors and providers.

Detailed Description Text (10):
Under the system it is possible for one entity to provide both a collector and
provider role, but under different and autonomous points in the network cycle. For
example, Sears may enroll a subscriber consumer in a Sears store account allowing
the consumer to use their Sears issued mag stripe card to identify them when they
deposit excess change into any merchant/collector terminal. In this capacity Sears
is playing the role of a distinct provider in the network. The card may then be
used to deposit excess funds at fast food restaurants, convenience stores, other
department stores, etc. Also the SP could go into any Sears store and deposit
excess funds into a Sears terminal for transfer to the network. On these occasions
Sears would be playing a distinct role as a participating MC, within the network,
and follow the same procedures as any other MC, as well as also being a PA at the
end of the network chain.

Detailed Description Text (11):
In FIGS. 1B&C, the Clearinghouse Managed System (CMS) starts with Level 1, the
subscriber/payors, tendering an excess financial payment to Level 2,
merchant/collectors. They in turn enter the amount of the excess payment into an
electronic cash register/remote terminals which then sends the funds and data on-
line per transaction, or along with other deposits in a batched format, by a
communication system to Level 3, clearinghouse central computer. Level 3 assigns
the funds to an account previously opened by Level 1 SP through services provided
by Level 3. The funds are then forwarded, when they reach pre-selected thresholds,
by EDI (Electronic Data Interface) transfer to Level 4, the provider accounts,
selected by Level 1 SP.

Detailed Description Text (12):
The Clearinghouse Managed System (CMS), has the network providing a more active
role by the system's central computer enrolling the SP in accounts and then
assuming the role of an account manager. Under this arrangement the network will
direct the overall operation of the system, issue transaction cards (bar code, mag
stripe and/or "smart" cards or devices), operate the system's central computer,
provide both on-line and off-line communications between the POS terminals and the
central computer, accept funds, assume fiscal responsibility for the SP funds on
deposit, maintain all account records, provide all outside payments to parties
selected by the SP, and even allow the SP the ability to access their accounts for
the purpose of receiving credit at the time of POS purchase to pay the MC. Under
the CMS, in addition to the network serving as an account manager, it will also
appoint banks, credit card institutions, and merchant/collectors to assume
additional fiduciary responsibilities.

Detailed Description Text (13):
In FIGS. 1D&E, the Provider Managed System (PMS) starts with Level 1, the
subscriber/payors, tendering an excess financial payment to Level 2,
merchant/collectors. They in turn enter the amount of the excess payment into an
electronic cash register/remote terminals which then preferably send the funds and

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data, along with other deposits in a batched format, by a communication system to
Level 3, clearinghouse central computer. Level 3 then segregates the transactions
per provider accounts. The data and funds are then forwarded, when they reach pre-
selected thresholds, by EDI (Electronic Data Interface) transfer to the Level 4
providers for account management and final distribution. Level 1 SP initially join
the network by enrolling in accounts with Level 4 providers.

Detailed Description Text (14):
The Provider Managed System (PMS), is an "open" system that creates a network
whereupon SP will directly enroll in accounts managed by PA, receive mag stripe
cards issued by the PA, and deposit their excess change at POS locations to be
transferred by the MC to a neutral network clearinghouse (CCC). Under the PMS, the
CCC will accept and process the transaction data and funds and forward both to the
PA according to the card identification. The PA will then manage the accounts per
the SP instructions.

Detailed Description Text (15):
In the PMS scenario both the merchant/clearinghouse are passive as to the opening
of accounts and the SP selections of the final distribution of the funds. Here both
the payees and the clearinghouse only accept deposits and transfer both the cash
and transaction records onto the end PA.

Detailed Description Text (17):
In FIG. 1F, in both the Clearinghouse Managed System or Provider Managed System the
data transfer is sent via a proprietary network from Level 2 MC to Level 3. After
processing by Level 3 selected data is sent via a proprietary network to Level 4.
On the funds transfer side Level 1 deposits the funds at Level 2 outlets. Level 2
deposits the finds into the MC's bank account and by EDI the finds are transferred
to Level 3's bank account for final EDI to Level 4's bank account.

Detailed Description Text (21):
In the PMS embodiment of the invention the CCC acts as a clearinghouse and
transfers all data and funds onto the respective PA for account management and
final distribution.

Detailed Description Text (22):
The CCC communications system CS also connects the CCC to charity computers CHy and
other computer OCz, where y=1 . . . k, and z=1 . . . j such as bank computers,
merchandise computers, debit account holders, credit card issuers, etc. These
charities and other institutions are the ultimate receivers of the donations and
deposits collected at the electronic cash registers ECRx. The CCC also includes a
default account DA with consumer ledgers to hold moneys not otherwise allocated.

Detailed Description Text (23):
The ECRx includes a change display for exhibiting cash transactions, credit cards,
or check purchases. The display automatically operates to show numbers in question.
A card reader CDx with a keypad KPx allows the SP or clerk to enter the deposit
directly. The keypad KPx permits the SP to change the allocation for this
transaction alone or permanently. The keypad KPx also allows the SP to reduce the
amount deposited so that he can receive cash change. The terminal RTx or ECRx
reports the deposit directly to the CCC via the communication system CS. The CCC
prints out periodic reports for interested parties on a need-to-know basis.

Detailed Description Text (26):
If the consumer gives the clerk the exact price nothing more need happen. However,
if the money offered the clerk exceeds the price, the consumer may, if he or she
wishes, choose to receive the change or to donate or deposit all or a portion of
the change. To do the latter, he or she enters a card number into the keypad KPx or
enters the card itself into the card reader CDx. The latter reads the number from a
bar code or magnetic stripe on the card. The consumer can also enter into the

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keypad how much of the total change, he or she is to receive, should be credited to various predetermined accounts in the CCC. The register ECRx reads the numbers entered into the keyboard or the number entered by way of the card reader CDx.

Detailed Description Text (27):
In addition if SP wish to make a direct deposit of finds into the network, (rather than make a purchase and tender excess funds), all that is necessary is to enter the amount deposited into the ECRx and the funds will be transferred to the CCC.

Detailed Description Text (29):
After receiving the data, the ECR accesses the CCC. The latter allocates the change, a portion of the change, or the amount of a direct deposit provided by the SP among various charity accounts CA and other accounts OA in the CCC. The distributions to various accounts are preprogrammed commands which the consumer has previously instructed the CCC to complete. For each deposit or donation made, the SP receives a printed receipt of the transaction from the ECRx or RTx.

Detailed Description Text (30):
If desired, the consumer can choose to deposit only a fraction of the difference between the cash presented and the price. The consumer then enters the amount to be deposited and receives the appropriate cash change.

Detailed Description Text (31):
According to an embodiment of the invention, with every transaction, the computer electronically transfers all amounts allocated to each charity CHy immediately, as soon as the computer can access the charity computer, or when there is a sufficient amount of money. In this way the donor is always assured that the contribution takes effect. Deposits in the other accounts OA may be sent immediately or held until a sufficient amount is accumulated to be acceptable by the other institutions.

Detailed Description Text (34):
In step 110, the clerk then enters the amount of the cash payment into the ECRx. Under normal circumstances, the cash payment will equal or exceed the total spending price unless there is deposit of cash into the system without a purchase. However, the invention allows the SP to withdraw moneys from a credit balance in one of the accounts recorded in the CCC. While unlikely, this may also occur with a credit or debit card sale. Thus, in some situations, the amount of cash may fill short of the total price. In step 114 the cash register determines if the amount of cash exceeds the total price.

Detailed Description Text (40):
If the answer to step 140, namely to the question whether there is more cash than the price, is yes, step 154 causes the ECR to display a message asking whether the customer wishes to retain some of the change due. If yes, the ECR prompts the customer to enter into the keypad KPx how much he or she wishes to retain or deposit. In step 157, the cash register ECR indicates to the clerk to give the appropriate net change and shows the net deposit amount.

Detailed Description Text (56):
In step 306, the clerk enters the amount of payment, on most occasions cash, into the terminal computer. However, if a check, debit or credit card is tendered by the SP, any excess payment effectively becomes cash and is therefore eligible for deposit.

Detailed Description Text (64):
Referring now to FIG. 5B if the answer is yes, in step 332 the subscriber or the clerk enters the subscriber's card into the terminal. The terminal computer reads the card and automatically records all of the cents in the POS change as a deposit or contribution. If the subscriber wishes to add in all of the change (coins and

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bills) 332A is entered into the computer. If the subscriber wishes to add in a specified portion of the change, 332B is prompted into the keypad along with the specified amount, for example $1.54 out of $2.54 in available change.

Detailed Description Text (80):
In FIG. 7 Level 1 a subscriber subscriber (SP) makes an exact payment using a check, credit or debit card and tenders the draft to a payee on Level 2 who in turn deposits the draft for customary authorization, approval, and payment by Level 3 Account Managers (AM) (as in banks or credit institutions). Under the provisions of the invention Level 3 AM will now also add or subtract a predetermined calculation to the face amount of the draft or the account entry itself for the purpose of creating an excess payment. The amount of excess payment called a rounder amount is then added to the face amount of the draft and the total number is then debited (as in withdrawals or account fees) or added (as in deposits or interest payments) to the account balance. Level 3 AM will then manage the funds and make distributions to Provider Services (PS) Level 4 (as in mutual funds, annuities, etc.).

Detailed Description Text (82):
The rounder system versus the POS system occurs in a different environment and at a different point in the commercial purchasing cycle. The processing of transactions occurs at the "back end" of the commercial cycle when check and credit drafts are debited against their existing account balances. Effectively, the invention adds (as in withdrawals or account fees) or subtracts (as in deposits/payments or interest dividends) an amount of excess funds, e.g. $1, $2.14, $5.01, $10, $0.28, etc., to the face amount or number of entries and then adjusts the account balance accordingly. The amount of excess funds are then displayed in the account and periodically transferred to accounts for provider services, i.e., mutual funds, annuities, merchandise, charities, etc.

Detailed Description Text (119):
In step 775 the computer transfers out the charity contributions, savings, investments, and other accounts.

Detailed Description Text (128):
The detailed computer processing required to create rounder account contributions is continued in FIG. 9C in regard to deposits or fee income.

Detailed Description Text (129):
In the processing of deposits or interest into accounts we reverse the process and decrement the amount of money going into the checking account so that we can create excess funds. Therefore, we can apply similar rules, as previously discussed, when the invention dealt with account withdrawals, but only in a decrementing fashion.

Detailed Description Text (130):
In the preferred embodiment we will decrement deposits and interest payments only to eliminate coin amounts.

Detailed Description Text (131):
Starting at the top, in step 634 the computer asks, Is this transaction a deposit or interest fee?

Detailed Description Text (134):
If the answer is no, in step 640 the rounder account contribution equals zero since there are no coins in the entry amount of the deposit. The program then goes to step 644.

Detailed Description Text (135):
If the answer is yes, in step 642 the cents are subtracted from the face amount and the coins become rounder contributions. For example, if the deposit was for $10.14 the rounder would take off the $0.14 and the net deposit would be for $10.00.

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Detailed Description Text (136):
In step 644 the rounder amount is subtracted from the face amount to determine the total deposit.

Detailed Description Text (137):
In step 646 the total deposit is then added to the existing balance to determine the new balance.

Detailed Description Text (138):
The ability for the invention to remove coins from checking account deposits will allow for easier balancing of checking accounts.

Detailed Description Text (152):
If the answer is no, computer goes to step 743 and asks, Is this transaction a deposit or interest?

Detailed Description Text (168):
In step 990 the computer transfers out the charity contributions, savings, investments, and other accounts.

Detailed Description Text (182):
If the answer is no, in step 840 the rounder account contribution equals zero since there are not any coins in the entry amount of the deposit. The computer then goes to step 844.

Detailed Description Text (183):
If the answer is yes, in step 842 the cents are subtracted from the entry amount and the coins become rounder contributions. For example if the payment was for $500.14, the rounder would take off the $0.14 and the net deposit would be for $500.00.

Detailed Description Text (202):
The invention also provides a four level rounder system (RS) for subscriber/subscribers to create excess funds from account entries connected with transactions paid for by check, ATM machine, credit, or debit card (which can occur at a variety of commercial points: POS counters, on a person to person basis, by mail, by wire transfer, by telephone, by computer, etc.). The rounder system would apply a computerized rounder amount to create excess funds in which the active cooperation of the payee is not needed and when the face amount of the payment being tendered is not in excess of the actual purchase price as the required means to establish the excess funds.

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L10: Entry 16 of 21   File: USPT   May 15, 2001

US-PAT-NO: 6233566
DOCUMENT-IDENTIFIER: US 6233566 B1

TITLE: System, method and computer program product for online financial products trading

DATE-ISSUED: May 15, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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Levine; Monica L.	Sheperdstown	WV		
Minton; Gabriel D.	Keddysville	MD		
Poletti; Jon	Frederick	MD		
Sondregger; Dean	Ashburn	VA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Ultraprise Corporation	Dulles	VA			02

APPL-NO: 09/ 270837   [PALM]
DATE FILED: March 18, 1999

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATIONS This application claims the benefit of Appl. Ser. No. 60/114,578, filed Dec. 31, 1998.

INT-CL: [07] G06 F 17/60, G06 G 7/52

US-CL-ISSUED: 705/37; 705/36, 705/38
US-CL-CURRENT: 705/37; 705/36, 705/38

FIELD-OF-SEARCH: 705/38, 705/37, 705/36, 705/35, 705/67, 705/68, 705/69, 705/41, 369/918, 369/918.1, 369/948.3, 235/379

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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ART-UNIT: 275

PRIMARY-EXAMINER: Stamber; Eric W.

ASSISTANT-EXAMINER: Kanof; Pedro

ATTY-AGENT-FIRM: Sterne, Kessler, Goldstein & Fox P.L.L.C.

ABSTRACT:

An online centralized financial products exchange system. The invention is a
system, method and computer program product that creates a "marketplace" for end-
to-end financial products life cycle transactions. More particularly, the invention
provides a centralized exchange system for the trading of loans. The system
includes a plurality of Web servers for receiving and providing loan information
from and to subscribers on several Web clients and a database server for searching
the pre-set rules to match potential buyers with sellers. The system also includes
a database for storing information relating to negotiations (i.e., bidding) for the
sale of loans and for storing pre-set rules for pre-registered buyers and sellers.
The system further includes a database and server for storing risk/return
information that is made available to subscribers for analysis.

36 Claims, 26 Drawing figures

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L10: Entry 16 of 21   File: USPT   May 15, 2001

DOCUMENT-IDENTIFIER: US 6233566 B1
TITLE: System, method and computer program product for online financial products
trading

Brief Summary Text (6):
Financial products are one of the types of products available through electronic
commerce activities. Consumer loan products, one example of financial products
available through electronic commerce, are typically divided into two categories--
conforming (or conventional) loans and non-conforming (or non-conventional) loans.
Conforming loans are low risk loans and include traditional primary residence
mortgage loans to consumers with good credit histories and loans to consumers who
qualify under certain government-backed loan programs (e.g., Federal Housing
Administration (FHA) or the Veterans Administration (VA)).

Brief Summary Text (21):
The mortgage banker pools the loans and advertises to investors who may be
interested in purchasing a pool of loans. For example, a typical pool may consist
of 300 loans with an estimated total value of $30 million or may consist of 3000
loans with an estimated total value of $300 million. The potential investor,
typically a bank, securitization company or another mortgage banker, will review
the information for each loan in the pool and either accept, decline, or reserve
its decision for each loan in the pool. Then, the investor may send a revised pool
back to the mortgage banker with an offering price to buy the revised pool. The
mortgage banker then may add other loans to the pool and resend the pool to the
investor for review. This negotiation (or bidding) continues until a sale is made
or rejected. The rejected loans may be used already in other pools or may be used
directly for securitization, as discussed below.

Brief Summary Text (23):
Naturally, investors of the loan pools have developed certain rules for evaluating
the suitability of the loans for securitization. However, the mortgage bankers'
rules used for grouping certain loans together in a pool may be different from the
rules used by the investor in deciding which loans it would like to purchase in a
pool and the rules used buy lenders in making the underlying loans in the first
place. For example, the mortgage banker in an attempt to sell the low risk and high
risk loans together, may want to group together loans made to borrowers with high
FICO scores with loans made to borrowers with lower FICO scores. However, the
investor may have rules which do not allow the purchase of any pool with a loan
made to a borrower having a FICO score less than a predetermined amount. As a
result, negotiations between the mortgage banker and the investor must occur in
order to decide on a pool and a price that is suitable to both parties. It is
important to note that although the rules are devised as guidelines for buying and
selling loans, these rules may be disregarded or altered on a case-by-case basis.
Further, each entity described above may frequently change its rules based on
market conditions and other relevant factors.

Detailed Description Text (21):
The present invention relates to a system, method, and computer program product for
analyzing, valuating, buying and selling financial products, such as loans. The
loans contemplated for use with the present invention include, for example,

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conforming and non-conforming loans, such as residential mortgage loans, multi-family mortgage loans, commercial mortgage loans, consumer and commercial installment loans, small business loans, student loans and vehicle/boat/plane loans. Although the embodiment described herein relates specifically to loans, it would be apparent to one skilled in the relevant art(s) that the present invention could also be used for analyzing, valuating, buying and selling a variety of other financial products, including, for example: (1) revolving lines of credit, such as credit card <u>accounts</u> and home equity lines of credit, (2) annuities, (3) insurance products, and (4) consumer and commercial assets, such as certificates of <u>deposit</u>.

<u>Detailed Description Text</u> (103):
As shown in FIG. 7, a loan agent, Tom Smith, has a personal <u>account</u> on system 200, in which his current loan application data is stored. A GUI 702, shown in FIG. 7, includes a window 704 to display the primary applicant's name, the loan request amount and the status of the loan application. GUI 702 also provides the loan agent with a loan summary window 706 to display detailed information for each pending loan application. Each time a new loan application is initiated, the application is added to the loan agent's <u>account</u>.

<u>Detailed Description Text</u> (111):
Referring to FIG. 14, a GUI 1404 shows an interface that can be used by the loan agent to search the marketing database for preliminary applicant information. When a loan agent receives a call from an applicant, the marketing database can be searched, using, for example, the applicant's last name and zip code, as shown in windows 1408 and 1412, or using a priority code, as shown in a window 1416, to match the applicant with the pre-existing information in the marketing database. The search results are displayed in a window 1420. As shown in FIG. 14, depending on the detail of the search information, more than one match may appear in window 1420. The particular applicant's name is then highlighted, and the applicant information for that applicant is displayed to the right of window 1420. When the user depresses a button 1424, labeled "<u>Qualify</u>", the selected applicant's information is automatically entered into GUI 704 so that the loan agent must only verify this information and does not need to manually re-enter this information, thereby saving time.

<u>Detailed Description Text</u> (117):
In a step 636, the manager of the loan origination company then determines, using workstation 246, whether to give final approval to the applicant's loan request. If final approval is denied, the loan application data is archived in origination archive 226 of the loan application data warehouse, in step 620 and the flow follows as described above. If the loan is given final approval, the loan originator and application proceed through loan closing in a step 640 and <u>funding</u> is provided to the loan applicant in a step 644. Similar GUIs (not shown) are available through system 200 for use in loan closing step 636.

<u>Detailed Description Text</u> (120):
A person wishing to sell a loan or loan pool may access system 200 via workstation 280d to publish a loan or loan pool for sale. In the case of a loan pool, the seller may first access system 200 via workstation 280f to create the loan pool. Workstation 280f can be used to search currently available loans for a seller using certain predetermined criteria (e.g., FICO score, loan amount, loan term, etc.) to generate a pool of loans <u>satisfying</u> the search criteria. This pool can then be saved and stored in databases 221 and 222 of portfolio subsystem 220.

<u>Detailed Description Text</u> (122):
In one embodiment, subscribers each have a profile archived in system 200. The profile includes the subscriber's contact information, such as, the name of the company for which the subscriber works, the subscriber's telephone number(s), fax number(s), address information and electronic mail address information. The profile also includes a list of all loans or loan pools that have been published by the

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subscriber for sale in system 200. Other subscribers can access this profile information for review. The subscriber can also access his own profile to update the information therein. In one embodiment, the subscriber can set up his rules for his profile using the loan criteria to indicate the <u>conditions</u> under which the subscriber wishes to be notified by the system of a published loan or loan pool. The subscriber may be provided with the option of whether to maintain his pre-set rules as private, or whether to allow other subscribers to access them.

<u>Detailed Description Text</u> (124):
In one embodiment, when the subscriber logs onto system 200, he receives a "buy alert" that displays new loans or loan pools that have entered the system 200 and that meet the subscriber's pre-set rules. Also, while the subscriber is logged into his <u>account</u> on system 200, a "buy alert" may flash on the subscriber's computer screen if a new loan or loan pool meeting his pre-set rules enters the system.

<u>Detailed Description Text</u> (130):
The seller who published the loan(s) is then notified by exchange system 200 that an offer has been made, as shown in a step 1524. Notification can be effected to the seller in any of the same manners as discussed above with respect to step 1512. Alternatively, the seller may have a personal <u>account</u> in exchange system 200 that he periodically checks. Exchange system 200 may notify the seller of incoming offers simply by posting the offer to the seller's <u>account</u>.

<u>Issued US Original Classification</u> (1):
<u>705/37</u>

<u>Current US Original Classification</u> (1):
<u>705/37</u>

<u>Field of Search Class/SubClass</u> (2):
<u>705/37</u>

<u>US Reference US Original Classification</u> (13):
<u>705/37</u>

<u>US Reference US Original Classification</u> (17):
<u>705/37</u>

<u>US Reference US Original Classification</u> (28):
<u>705/37</u>

<u>US Reference US Original Classification</u> (29):
<u>705/37</u>

<u>US Reference US Original Classification</u> (46):
<u>705/37</u>

<u>US Reference US Original Classification</u> (50):
<u>705/37</u>

<u>US Reference US Original Classification</u> (52):
<u>705/37</u>

<u>US Reference US Original Classification</u> (55):
<u>705/37</u>

<u>US Reference US Original Classification</u> (60):
<u>705/37</u>

<u>US Reference US Original Classification</u> (76):

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L11: Entry 9 of 19   File: USPT   Nov 27, 2001

US-PAT-NO: 6324525
DOCUMENT-IDENTIFIER: US 6324525 B1

TITLE: Settlement of aggregated electronic transactions over a network

DATE-ISSUED: November 27, 2001

INVENTOR-INFORMATION:

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APPL-NO: 09/ 121559   [PALM]
DATE FILED: July 22, 1998

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATIONS This a continuation-in-part of application
Ser. No. 08/664,824, filed Jun. 17, 1996, now issued as U.S. Pat. No. 5,889,863.
This application is related to copending application Ser. No. 09/121,470, entitled
"Third Party Value Acquisition For Electronic Transaction Settlement Over A
Network", filed on Jul. 22, 1999, which is incorporated herein by reference in its
entirety.

INT-CL: [07] G06 F 17/60

US-CL-ISSUED: 705/40
US-CL-CURRENT: 705/40

FIELD-OF-SEARCH: 705/40, 705/35, 380/25

PRIOR-ART-DISCLOSED:

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FOREIGN-PAT-NO   PUBN-DATE   COUNTRY   US-CL

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97/46961	May 1997	WO

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ART-UNIT: 215

PRIMARY-EXAMINER: Millin; Vincent

ASSISTANT-EXAMINER: Thompson, Jr.; Forest O

ABSTRACT:

In one embodiment, an architecture that consummates an electronic transaction between a first electronic device, such as an acquirer device, a second electronic device, such as an issuer device, and a plurality of electronic terminals, such as merchant terminals, by establishing a communication between the plurality of devices and terminals and accumulating transactions that are approved by the second electronic device. Then, periodically the plurality of transactions are settled using a transfer of monetary value between the first electronic device and the second electronic device. For example, the present invention uses electronic cash transfer to replace conventional settlement, which requires the use of a third-party settlement service.

24 Claims, 130 Drawing figures

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L11: Entry 9 of 19   File: USPT   Nov 27, 2001

DOCUMENT-IDENTIFIER: US 6324525 B1
TITLE: Settlement of aggregated electronic transactions over a network

Brief Summary Text (2):
A portion of the disclosure of this patent document contains material that is
subject to copyright protection. The copyright owner has no objection to the
facsimile reproduction by anyone of the patent disclosure, as it appears in the
Patent and Trademark Office patent files or records, but otherwise reserves all
copyright rights whatsoever.

Brief Summary Text (6):
The present invention relates to an electronic representation of a monetary system
for implementing electronic money payments as an alternative medium of economic
exchange to cash, checks, credit and debit cards, and electronic funds transfer.
The Electronic-Monetary System is a hybrid of currency, check, card payment
systems, and electronic funds transfer systems possessing many of the benefits of
these systems with few of their limitations. The system utilizes electronic
representations of money that are designed to be universally accepted and exchanged
as economic value by subscribers of the monetary system.

Brief Summary Text (7):
Today, approximately 350 billion coin and currency transactions occur between
individuals and institutions every year. The extensive use of coin and currency
transactions has limited the automation of individual transactions such as
purchases, bank account deposits, and withdrawals. Individual cash transactions are
burdened by the need to have the correct amount of cash or providing change.
Furthermore, the handling and managing of paper cash and coins is inconvenient,
costly, and time consuming for both individuals and financial institutions.

Brief Summary Text (8):
Although checks may be written for any specific amount up to the amount available
in the account, checks have very limited transferability and must be supplied from
a physical inventory. Paper-based checking systems do not offer sufficient relief
from the limitations of cash transactions, sharing many of the inconveniences of
handling currency while adding the inherent delays and costs associated with
processing checks. To this end, economic exchange has striven for greater
convenience at a lower cost, while also seeking improved security.

Brief Summary Text (9):
Automation has achieved some of these qualities for large transactions through
computerized Electronic Funds Transfer ("EFT") systems. EFT is essentially a
process of value exchange achieved through the banking system's centralized
computer transactions. EFT services are a transfer of payments utilizing electronic
"checks," which are used primarily by large commercial organizations.

Brief Summary Text (10):
Home banking bill payment services are examples of an EFT system used by
individuals to make payments from a home computer. Currently, home banking
initiatives have found few customers. Of the banks that have offered services for
payments, account transfers, and information over the telephone lines using

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personal computers, less than one percent of the bank's customers are using the
service. Home banking has not been a successful product, because, for example, the
customer cannot <u>deposit</u> and withdraw money as needed in this type of system.

Brief Summary Text (11):
Current EFT systems, credit cards, or debit cards, which are used in conjunction
with an on-line system to transfer money between <u>accounts,</u> such as between the
<u>account</u> of a merchant and that of a customer, cannot <u>satisfy</u> the need for an
automated transaction system providing an ergonomic interface. Examples of EFT
systems that provide non-ergonomic interfaces are disclosed in U.S. Pat. Nos.
5,476,259; 5,459,304; 5,452,352; 5,448,045; 5,478,993; 5,455,407; 5,453,601;
5,465,291; and 5,485,510.

Brief Summary Text (12):
To implement an automated, convenient transaction that can dispense some form of
economic value, there has been a trend towards off-line payments. For example,
numerous ideas have been proposed for some form of "electronic money" that can be
used in cashless payment transactions as alternatives to the traditional currency
and check types of payment systems. See U.S. Pat. No. 4,977,595, entitled "METHOD
AND APPARATUS FOR IMPLEMENTING ELECTRONIC CASH," and U.S. Pat. No. 4,305,059,
entitled "MODULAR <u>FUNDS</u> TRANSFER SYSTEM." The more well-known techniques include
magnetic stripe cards purchased for a given amount and from which a prepaid value
can be deducted for specific purposes. Upon exhaustion of the economic value, the
cards are thrown away. Other examples include memory cards or so called smart cards
which are capable of repetitively storing information representing value that is
likewise deducted for specific purposes. A smart card is generally a hand-held
portable device that includes a microprocessor, input-output ports, and a non-
volatile memory (e.g., a few kilobytes of memory).

Detailed Description Text (58):
Merchants generally require a mechanism for verifying legitimate cardholders of
valid, branded bankcard <u>account</u> numbers. A preferred embodiment utilizes technology
to link a cardholder to a specific bankcard <u>account</u> number and reduce the incidence
of fraud and thereby the overall cost of payment processing. Payment processing
includes a mechanism that allows for cardholder confirmation that a merchant has a
relationship with a financial institution allowing it to accept bankcard payments.
Cardholders should also be provided with a way to identify merchants with whom they
can securely conduct electronic commerce. Merchant authentication is ensured by the
use of digital signatures and merchant certificates.

Detailed Description Text (62):
A Single <u>Account</u> Wallet 160 at bank web site 182 represents the MIME message that
is created by the Certificate Issuance system. This MIME message contains a
VeriFone wallet. The VeriFone wallet contains a single payment instrument and the
certificate associated with it. For security reasons, the private key is not
included in the wallet. The consumer has to specify a private key before using the
instrument for payment. When the consumer is issued the certificate, this MIME
message is sent to a browser, which resides at a consumer desktop 186. The browser
launches a Certificate Installation application 174, 144, which is defined as a
helper application in the browser. The Certificate Installation application 174,
144 reads the MIME message and installs a wallet into a wallet database 158.

Detailed Description Text (66):
Certificate Issuance CGI scripts 162 and Single <u>Account</u> Wallet 160 at Bank Web Site
182 is processed as described in the native system. The Certificate Installation
Applet of Bank Web Site 182 is utilized by the Certificate Issuance CGI scripts 162
system to deliver a consumer's certificate to the consumer's desktop.

Detailed Description Text (83):
Payment authorization is a process by which permission is granted by a payment

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gateway operating on behalf of a financial institution to authorize payment on behalf of the financial institution. In one embodiment, payment authorization is a process that assesses transaction risk, confirms that a given transaction does not raise the account holder's debt above the account's credit limit, and reserves the specified amount of credit; and payment capture is a process that triggers the movement of funds from the financial institution to the merchant's account after settlement of the account.

Detailed Description Text (90):
FIG. 4 depicts the stages of generating and transmitting a payment authorization request in accordance with a preferred embodiment. FIGS. 5A through 5F depict views of the payment authorization request and its component parts in accordance with a preferred embodiment. In function block 410, merchant computer system 130 creates a basic authorization request 510. Basic authorization request 510 is a data area that includes information for determining whether a request should be granted or denied. Specifically, it includes such information as the party who is being charged, the amount to be charged, the account number of the account to be charged, and any additional data, such as passwords, needed to validate the charge. This information is either calculated based upon prior customer merchandise selection or provided by the customer over secure link 270 established in the customer-merchant general-purpose secure communication protocol session. FIG. 5A depicts basic authorization request 510 in accordance with a preferred embodiment.

Detailed Description Text (123):
FIG. 10 depicts the stages of generating and transmitting a payment capture request in accordance with a preferred embodiment. FIGS. 11A through 11F depict views of the payment capture request and its component parts in accordance with a preferred embodiment. In function block 1010, merchant computer system 130 creates a basic capture request 1110. Basic capture request 1110 is a data area that includes information needed by payment gateway computer system 140 to trigger a transfer of funds to the merchant operating merchant computer system 130. Specifically, basic capture request 1110 includes a capture request amount, a capture token, a date, summary information of the purchased items, and a Merchant ID (MID) for the particular merchant. FIG. 11A depicts basic capture request 1110 in accordance with a preferred embodiment.

Detailed Description Text (138):
In function block 1245, payment gateway computer system 140 determines the financial institution for which capture is requested by inspection of basic capture request 1110. Payment gateway computer system 140 contacts the appropriate financial institution using a secure means (e.g., a direct-dial modem-to-modem connection or a proprietary internal network that is not accessible to third parties), and using prior art means, instructs a computer at the financial institution to perform the requested funds transfer after settlement.

Detailed Description Text (150):
In function block 1430, merchant computer system 130 verifies payment gateway computer system's 140 signature public key certificate 1320. Merchant computer system 130 performs this verification by making a call to the certification authority associated with the certificate. If verification of the certificate fails, then merchant computer system 130 concludes that the capture response is counterfeit and raises an error condition.

Detailed Description Text (151):
In function block 1440, merchant computer system 130 validates payment gateway digital signature 1325. Merchant computer system 130 performs this validation by calculating a message digest over the contents of the combined basic capture response 1310 and signature public key certificate 1320. Merchant computer system 130 then decrypts digital signature 1325 to obtain a copy of the equivalent message digest calculated by payment gateway computer system 140 in function block 1255. If

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the two message digests are equal, then digital signature 1325 is validated. If
validation fails, then merchant computer system 130 concludes that the
authorization response is counterfeit and raises an error condition.

Detailed Description Text (176):
An authorization without capture transaction is used to validate the card holder's
account number for a sale that needs to be performed at a later stage. The
transaction does not confirm a sale's completion to the host, and there is no host
data capture in this event. The vPOS captures this transaction record and later
forwards it to the host to confirm the sale in a forced post transaction request.
An authorization without capture transaction can be initiated both by the consumer
and the merchant.

Detailed Description Text (180):
The return transaction is used to credit the return amount electronically to the
consumer's account when purchased merchandise is returned. The vPOS captures the
return transaction record when the merchandise is returned, and this transaction
can be initiated only by the merchant.

Detailed Description Text (182):
The pre-authorization transaction is identical to the authorization without capture
transaction, but the consumers' "open-to-buy" amount is reduced by the pre-
authorization amount. An example of this type of transaction is the "check-in"
transaction in a hotel environment. A check-in transaction sends a pre-
authorization request to the host so that an amount required for the customers'
stay in the hotel is reserved. The pre-authorization transaction is followed by a
pre-authorization complete transaction. This transaction can be initiated both by
the consumer and the merchant.

Detailed Description Text (185):
The host administrative transactions do not require any payment instrument. The
balance inquiry transaction is used for on-line inquiry into the balance of the
merchant's account. The batch data or the configuration data is not affected by
this transaction.

Detailed Description Text (224):
URL Functionality: Validates the cardholder's account number for a sale that is
performed at a later stage. The transaction does not confirm the sale to the host,
and there is no host data capture. The vPOS captures this transaction record and
later forwards it to confirm the sale in the Forced Post transaction request.

Detailed Description Text (317):
URL Functionality: Credits the return amount electronically to the consumer's
account when previously purchased merchandise is returned. The vPOS terminal
captures the transaction record for this transaction.

Detailed Description Text (823):
Account Number (char[ ])

Detailed Description Text (954):
For example, to fully qualify a particular merchant in a multi-merchant system, the
ADT is queried to ascertain the particular Gateway (VFITest), then if Bank of
America requires verification of network communication information, then the
particular CDT is accessed with, for example, VISA. The particular merchant will
service VISA transactions utilizing a particular acquirer. The particular piece of
merchandise will also be detailed in a database. Finally, the merchant
Configurations will also be stored in the database to facilitate E-mail and name
lookup.

Detailed Description Text (961):

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FIG. 20B is a prior art data structure 2002 representing a POS transaction request. Data structure 2002 includes a TID field 2005, which identifies the physical terminal from which the transaction originates. In addition to the TID field, data structure 2002 also includes other data 2006 necessary to process a transaction, which includes such fields as a transaction type, a transaction amount, a currency type (such as U.S. dollars), credit card account number, and credit card expiration date.

Detailed Description Text (962):
FIG. 20C illustrates a vPOS architecture in accordance with a preferred embodiment with account requests being processed by a single acquiring bank. A vPOS 2007 processes a plurality of customers 2000 concurrently. For each such customer 2000, vPOS 2007 builds a data structure 2010, representing the transaction to be performed for that customer. Each data structure 2010 contains a unique "virtual terminal" ID. Then, vPOS 2007 selects a virtual terminal ID using a TID allocation database 2008. For each data structure 2010, vPOS 2007 initiates communication with acquiring bank 2004 using communication link 2003.

Detailed Description Text (963):
FIG. 20D is a data structure 2010 representing a vPOS transaction request in accordance with a preferred embodiment. Data structure 2010 includes a TID field 2012, which identifies a virtual terminal ID associated with a particular transaction. In addition to TID field 2012, data structure 2010 also includes other data 2006 necessary to process a transaction. Data 2006 includes such fields as a transaction type, a transaction amount, a currency type (such as U.S. dollars), credit card account number, and credit card expiration date.

Detailed Description Text (967):
FIG. 20G depicts in detail the process of obtaining a TID from the database in accordance with a preferred embodiment. Execution begins in stage 2040. In stage 2041, the routine constructs a database call to reserve a TID for processing, for example, by constructing an SQL statement to retrieve a TID row from the database. In stage 2042, the routine executes the database call that was constructed in stage 2041. In stage 2043, the routine constructs a second database call to extract the TID from the row that was reserved in stage 2042. In stage 2044, the database call constructed in stage 2043 is executed to obtain the TID. In stage 2045, a return code is checked to verify whether the TID was successfully obtained. If the TID was successfully obtained, then control proceeds to stage 2046, which returns to the calling program. However, if the TID was not obtained, then control proceeds to stage 2047. In stage 2047, the routine checks to see whether an excessive number of retries have already been attempted. If there have been an excessive number of retries, then control proceeds to stage 2048, which exits with an error indication. If there has not been an excessive number of retries, then control proceeds once again to stage 2043 to retry the extraction operation.

Detailed Description Text (1141):
A preferred embodiment includes a single file or directory of files comprising a "wallet", which includes personal information and information about multiple payment methods. These payment methods (Visa cards, debit cards, smart cards, and micro-payments) also include information such as account numbers, certificates, key pairs, and expiration dates. The wallet can also include all the receipts and transaction records pertaining to every payment made using the wallet. A Cryptographic API component provides a standard interface for RSA and related cryptographic software or hardware. This support includes encryption, signature, and key generation. Choice of key exchange algorithm, symmetric encryption algorithm, and signature algorithm are configurable. A base class stipulates generic behavior, and derived classes handle various semantic options (e.g., software-based cryptography versus hardware-based cryptography.)

Detailed Description Text (1171):

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